



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : George H. Lowell et al.  
Application No. : 09/214,701  
Filed : September 30, 1999  
For : PROTEIN AND PEPTIDE VACCINES FOR INDUCING  
MUCOSAL IMMUNITY

Examiner : Jeffrey S. Parkin, Ph.D.  
Art Unit : 1648  
Docket No. : 484112.408USPC  
Date : November 22, 2006

Mail Stop RCE  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

FOURTH SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT TRANSMITTAL

Commissioner for Patents:

In accordance with 37 C.F.R. §§ 1.56 and 1.97 through 1.98, applicants wish to make known to the U.S. Patent and Trademark Office the references set forth on the attached Information Disclosure Statement. Copies of cited U.S. patents and published patent applications are not required and accordingly have not been provided. Copies of any other cited references are enclosed. As to any reference cited, applicants do not admit that it is "prior art" under 35 U.S.C. §§ 102 or 103, and specifically reserve the right to traverse or antedate any such reference, as by a showing under 37 C.F.R. § 1.131 or other method. Although the aforesaid references are made known to the U.S. Patent and Trademark Office in compliance with applicants' duty to disclose all information they are aware of that is believed relevant to the examination of the above-identified application, applicants believe that their invention is patentable.

Please acknowledge receipt of this Fourth Supplemental Information Disclosure Statement and kindly make the cited references of record in the above-identified application.

Applicants believe this Information Disclosure Statement has been timely filed; however, the Director is authorized to charge any fee due by way of this Information Disclosure Statement to our Deposit Account No. 19-1090.

Respectfully submitted,

Seed Intellectual Property Law Group PLLC



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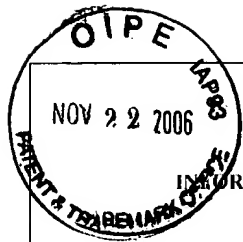
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Enclosures:

Information Disclosure Statement  
Cited References (4)

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**INFORMATION DISCLOSURE STATEMENT**  
(Use several sheets if necessary)

ATTY. DOCKET NO.  
484112.408USPC

APPLICATION NO.  
09/214,701

APPLICANTS  
George H. Lowell et al.

FILING DATE  
September 30, 1999

GROUP ART UNIT  
1648

**U.S. PATENT DOCUMENTS**

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						

**FOREIGN PATENT DOCUMENTS**

		DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION	
					YES	NO
	AK					
	AL					
	AM					
	AN					
	AO					

**OTHER PRIOR ART** (Including Author, Title, Date, Pertinent Pages, Etc.)

	AP	Earl, P. L. et al., "Native Oligomeric Human Immunodeficiency Virus Type 1 Envelope Glycoprotein Elicits Diverse Monoclonal Antibody Reactivities," <i>Journal of Virology</i> , 68:3015-3026, 1994.
	AQ	Stamatos, N.M. et al., "Neutralizing Antibodies from the Sera of Human Immunodeficiency Virus Type 1-Infected Individuals Bind to Monomeric gp120 and Oligomeric gp140," <i>Journal of Virology</i> , 72:9656-9667, 1998.
	AR	VanCott, T. C. et al., "Antibodies with Specificity to Native gp120 and Neutralization Activity against Primary Human Immunodeficiency Virus Type 1 Isolates Elicited by Immunization with Oligomeric gp160," <i>Journal of Virology</i> , 71:4319-4330, 1997.
	AS	VanCott, T.C. et al., "HIV-1 Neutralizing Antibodies in the Genital and Respiratory Tracts of Mice Intranasally Immunized with Oligomeric gp160," <i>The Journal of Immunology</i> , 160:2000-2012, 1998.

EXAMINER

DATE CONSIDERED

\* EXAMINER: Initial if reference considered, whether or not criteria is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant(s).